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MYCOLOGIA

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ILLUSTRATIONS OF FUNGI—VII

William A. Murrill

The accompanying plate represents ten of the more common species of *Hygrophorus* found in the United States. The figures are drawn from the studies of Mr. George E. Morris, based upon the publications of Dr. C. H. Peck, State Botanist of New York, whose excellent monograph of the New York species appeared in his report for 1906.

The genus as ordinarily accepted is characterized by a waxy hymenium; the species are fleshy, terrestrial, often brilliantly colored, and many of them are noted for their viscidity. None of them are known to be poisonous; but some species have not yet been thoroughly investigated. Most of them are either too rare or too small to be of importance as food.

Hygrophorus pratensis (Pers.) Fries

Meadow Hygrophorus

Plate 27. Figure 1. × $\frac{3}{4}$

Pileus firm, convex to expanded, often turbinate, 2–5 cm. broad; surface glabrous, not viscid, buff, tawny, white, or grayish; flesh thick, firm, white, edible, of delicate flavor; gills long-decurrent, thick, distant, often interveined, white or yellowish; spores subglobose to ellipsoid, hyaline, 6–8 × 5–6 μ; stem short, smooth, equal or tapering downward, solid or stuffed, white or subconcolorous, 3–5 × 1 cm.

This variable species is common in late summer in woods and

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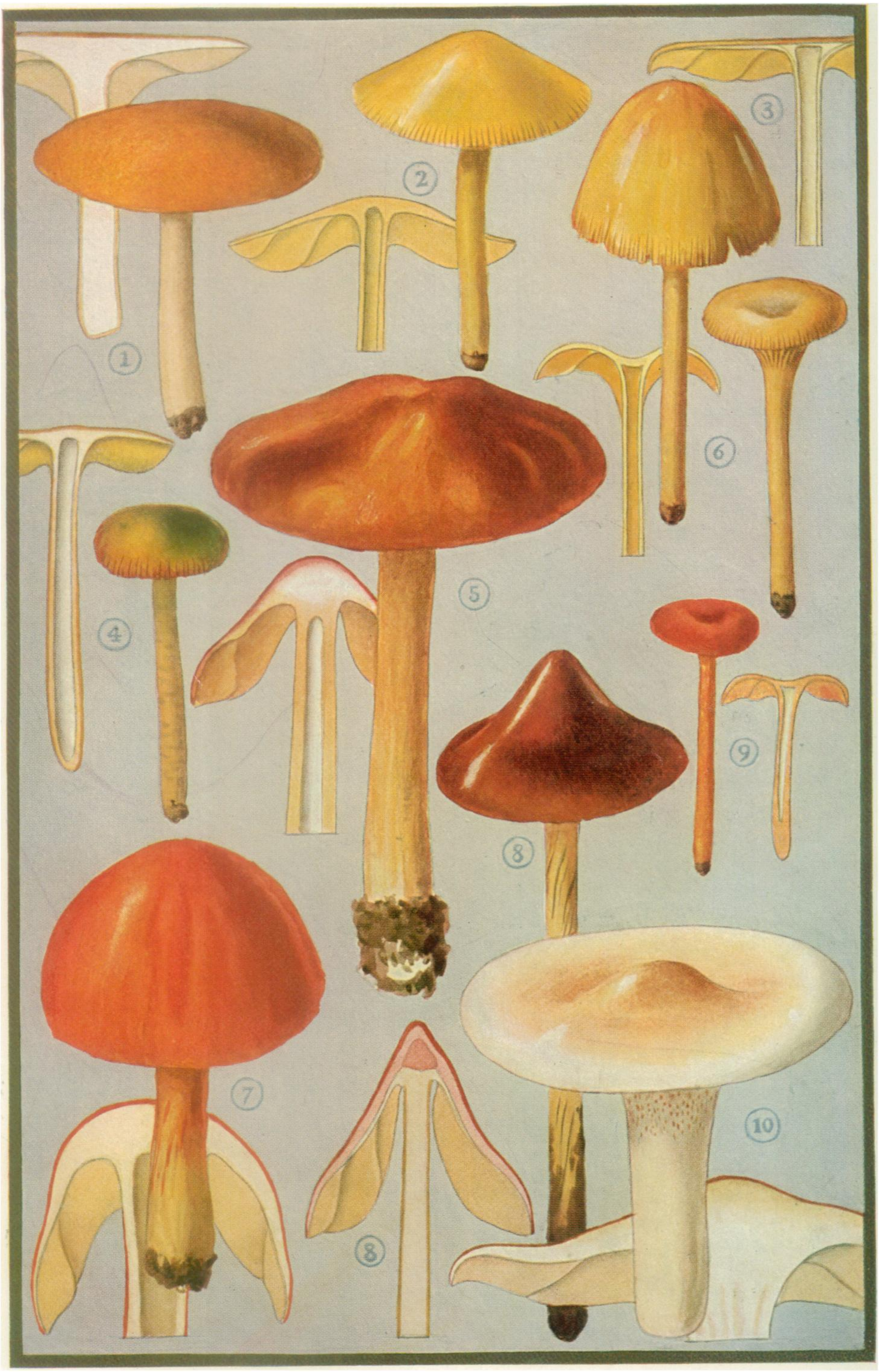

ILLUSTRATIONS OF FUNGI

pastures throughout the United States and Europe. It represents quite a different type from the bright-colored, viscid, hollow-stemmed species here figured, and was set apart by Karsten with several of its close relatives in a distinct genus.

Hygrophorus ceraceus (Wulf.) Fries

Waxy Hygrophorus

Plate 27. Figure 2. × ¾

Pileus thin, fragile, convex to plane, obtuse, 1–3 cm. broad; surface viscid, striatulate, pale-yellow, the color of wax; flesh concolorous; gills adnate or slightly decurrent, distant, very broad, concolorous; spores ellipsoid, hyaline, 7–8 × 4–5 μ; stem usually equal, straight, rarely flexuous, shining, concolorous, hollow, 3–8 × 0.3–0.5 cm.

This species is small, and yellow throughout, growing in groups among mosses or grasses. It is reported from Greenland to North Carolina and west to Minnesota and Ohio, and also occurs in Europe.

Hygrophorus chlorophanus Fries

Sulfur-colored Hygrophorus

Plate 27. Figure 3. × ¾

Pileus thin, fragile, convex to nearly plane, obtuse, striate and often lobed or split at the margin, 2–4 cm. broad; surface pale-yellow, rarely reddish at the center, glabrous, viscid; flesh thin, yellowish, edible; gills thin, fragile, adnexed, subdistant, ventricose, concolorous or paler; spores ovoid, hyaline, 7–8 × 4–5 μ; stem cylindric, glabrous, viscid, concolorous, hollow, 3–7 × 0.2–0.4 cm.

This species occurs commonly in damp woods from Maine to Alabama and west to Wisconsin; also in Europe.

Hygrophorus psittacinus (Schaeff.) Fries

Parrot Hygrophorus

Plate 27. Figure 4. × ¾

Pileus thin, convex to expanded, umbonate, striatulate on the margin, 1–3 cm. broad; surface smooth, reddish or yellow, covered with evanescent, greenish slime; flesh white, very thin; gills adnate-decurrent, thick, broad, ventricose, yellow, tinged with green; spores ellipsoid, hyaline, 7–8 × 5–6 μ; stem cylindric, subequal, tough, viscid, concolorous, 2.5–4 × 0.3–0.4 cm.

This very striking species occurs rather rarely in pastures and open woods in the eastern United States from New England to North Carolina, and also in Europe. Its brilliant colors and the greenish slime which envelops it make it conspicuous and easily recognized. Dried specimens fade to pale-orange or yellow.

Hygrophorus puniceus Fries

RED HYGROPHORUS

Plate 27. Figure 5. $\times \frac{3}{4}$

Pileus fragile, conic to subexpanded, obtuse or slightly depressed, 3–10 cm. broad; surface glabrous, viscid, not striate, scarlet, fading out with age, especially at the center; flesh white, tinged with red beneath the cuticle, mild and edible; gills slightly adnexed, broad, thick, distant, yellow, often becoming reddish; spores ellipsoid, hyaline, 8–10 × 4–5 μ; stem stout, subequal, glabrous, slightly striate, concolorous or paler, white at the base, hollow, 5–8 × 1–2 cm.

This is our largest red species of the genus. It occurs sparingly in moist woods in New York and New England, as well as in Europe, and has also been reported from Ohio and California. It is edible and very tender, although too rare to be considered for food.

Hygrophorus nitidus Berk. & Curt.

SHINING HYGROPHORUS

Plate 27. Figure 6. $\times \frac{3}{4}$

Pileus thin, fragile, convex, umbilicate, 1–2.5 cm. broad; surface viscid, striatulate on the margin when moist, pale-yellow, whitish when dry; flesh thin, pale-yellow; gills arcuate-decurrent, distant, interveined, pale-yellow; spores broadly ellipsoid, hyaline, 6–8 × 5–6 μ; stem slender, fragile, viscid, concolorous, hollow, 7–10 × 0.2–0.4 cm.

This small, yellow species occurs in groups or clusters in wet places during late summer. Although edible, it is too small to collect for food. It is reported from New England to Alabama and west to Minnesota, but it may have been confused with some forms of *Hygrophorus Cantharellus,* which it much resembles.

Hygrophorus coccineus (Schaeff.) Fries

Scarlet Hygrophorus

Plate 27. Figure 7. × ¾

Pileus thin, fragile, convex to plane, obtuse, 2–5 cm. broad; surface glabrous, viscid, scarlet, fading to pale-red, and finally yellowish; flesh whitish or yellowish, edible; gills adnate or with a decurrent tooth, distant, interveined, pale-yellow or reddish; spores ellipsoid, hyaline, 6–8 × 4–5 μ; stem cylindric or compressed, glabrous, hollow, scarlet above, yellow below, 3–5 × 0.3 cm.

This brilliantly colored species occurs in moist pastures and on mossy banks in Europe and eastern North America, having been reported from Greenland to North Carolina and west as far as Minnesota.

Hygrophorus conicus (Scop.) Fries

Conic Hygrophorus

Plate 27. Figure 8. × ¾

Pileus thin, fragile, conic, usually acute, often lobed at the margin, 2–4 cm. broad; surface viscid when moist, glabrous or fibrillose, sometimes becoming rimose, some shade of red or yellow, at times tinged with green, almost always turning black on drying; flesh thin, suffused with rosy hues; gills almost free, attenuate behind, thin, rather crowded, ventricose, yellow, blackening on drying; spores ellipsoid, hyaline, 9–11 × 6–8 μ; stem equal, fibrous-striate, hollow, yellow, becoming black on drying, 3–10 × 0.3–0.7 cm.

This species is usually readily distinguished by its conic cap with acute apex, as well as by its change of color to black on drying. It is common in moist woods and grassy places from Greenland to the Bahamas, and also occurs in Europe.

Hygrophorus miniatus Fries

VERMILION HYGROPHORUS

Plate 27. Figure 9. × ¾

Pileus fragile, regular, convex to plane or umbilicate, 1–5 cm. broad, surface glabrous or minutely squamulose, hardly viscid, scarlet, rarely yellow, soon fading; flesh yellow, mild, tender, edible; gills adnate or very slightly decurrent, distant, yellow, often tinged with red; spores ellipsoid, hyaline, 8–9 × 4–6 μ; stem slender, equal, glabrous, concolorous or slightly paler, stuffed or partly hollow, 2–7 × 0.2–0.4 cm.

This species is very variable in color, size, and mode of growth. It may be looked for in damp woods or swamps, and is readily noticed because of its brilliant coloring. Specimens always fade to yellow on drying.

Hygrophorus Laurae Morgan

LAURA'S HYGROPHORUS

Plate 27. Figure 10. × ¾

Pileus convex to expanded, unbonate, 5–10 cm. broad; surface viscid, white, tinged with red or brown, especially on the umbo; flesh white, edible; gills white, distant, adnate or decurrent, unequal; spores ellipsoid, hyaline, 8–9 × 5–6 μ; stem solid, white within, more or less curved, attenuate below, yellowish-white, scabrous above, 5–10 × 0.5–1 cm.

This species was originally described from Ohio by Morgan, but has since been found as far west as Kansas and as far east as Massachusetts, growing rather commonly in woods and groves during late summer and autumn. It represents a group of species distinguished from all the rest by a viscid, universal veil, which remains as an annulus or in the form of squamules at the apex of the stem. In the division of Fries' genus *Hygrophorus,* his name remains with this group and an older name, *Hydrophorus* Batt., is used for the viscid, hollow-stemmed species not furnished with a veil.